

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF GEORGIA  
ATLANTA DIVISION**

DONNA CURLING, *et al.*

*Plaintiffs,*

v.

BRAD RAFFENSPERGER, *et al.*,

*Defendants.*

CIVIL ACTION

FILE NO. 1:17-cv-2989-AT

**DECLARATION OF DR ERIC D. COOMER**

Pursuant to 28 U.S.C. § 1746, I, Dr. Eric D. Coomer, make the following declaration:

1.

My name is Dr. Eric D. Coomer. I am over the age of 21 years, and I am under no legal disability which would prevent me from giving this declaration. If called to testify, I would testify under oath to these facts.

2.

I am the Director of Product Strategy and Security for Dominion Voting Systems (“Dominion”). I was previously the Vice President of U.S. Engineering for Dominion, and prior to that, I was the Vice President of

Research and Development for Sequoia Voting Systems. I have been in product development for election systems since 2005.

3.

Georgia is implementing a voting solution developed by Dominion for its elections. Specifically, Georgia has purchased Dominion Democracy Suite for use in its elections. Democracy Suite includes ImageCast X Ballot-Marking Devices (BMD), which operate with a printer to produce a paper ballot, and ImageCast Precinct Polling Place Scanners, which are optical scanners which allow ballots to be scanned and tabulated. Dominion is also providing KNOWInk Poll Pads for voter check-in.

4.

The BMDs produce printed ballots with barcodes to accurately and efficiently count each vote along with human-readable plain-text ballot summaries that voters can use to verify their selections. The barcodes do not include any identifying information that could be used to violate the anonymity of the voter. The BMD touch-screen tablets run the Dominion Voting Systems software in Kiosk mode. This prevents any access to software or features outside of the certified installed program. The certified software on the BMD does not allow any communication from the device over the internet. In addition, the BMD has no physical component that would allow

for wireless transmissions. The format and accuracy of the data stored in the barcode for a BMD-marked ballot was subject to testing and verification during the certification process.

5.

Several Election Technology Vendors, including Dominion Voting Systems, Election Systems and Software, Unisyn, and Smartmatic supply BMDs that use barcodes to create summary ballots for voters. Dominion's ImageCast X BMD system is currently used by Cook County and the City of Chicago, Illinois, several jurisdictions within the States of Michigan and Pennsylvania, and will be used by several California counties including San Francisco, Alameda, Riverside, Contra Costa, and San Diego in the upcoming 2020 election cycle. In addition, 6 of the 10 largest counties in the country use BMD devices with barcodes (1. Los Angeles, CA, 2. Cook County/City of Chicago, 4. Maricopa, AZ, 5. San Diego, CA, 8. Dallas, TX, and 10. Riverside, CA). Of the 6 counties, 5 are using the Dominion BMD.

6.

Texas' decision not to certify the Dominion system was primarily based on perceived issues of complexity of configuring the equipment especially for smaller counties. However, Dominion's Democracy Suite solution with the ImageCastX BMD has been successfully used in multiple small counties

throughout the country since 2016. Other perceived issues raised in the Texas certification were assertions that the secrecy of the ballot was not preserved. This is incorrect. All data stored on the ImageCast Precinct tabulators is randomized. There is no uniquely identifying information stored in the audit mark, or on the compact flash memory card for any ballot that is tabulated, whether from the ImageCastX BMD, or from a hand-marked ballot.

7.

Dominion has worked closely with Georgia election officials on the rollout of the new system. As part of the development and deployment of Democracy Suite statewide, no existing components of Georgia's legacy DRE system is being used. Dominion's Election Management System will completely replace the GEMS system used in Georgia. No information, software, or source code from the existing DREs is being utilized.

8.

The Poll Pads are completely replacing the old ExpressPoll units and no information from the existing ExpressPoll units will be placed into the Poll Pads. The Poll Pads will instead receive flat text files for each election containing the then-current voter information from the state's voter-registration database. Based upon information received from KNOWink's

President and CEO, the Poll Pad is certified for use in the following states:  
California, Idaho, Indiana, Minnesota, New York, Ohio, Pennsylvania, Texas,  
Virginia.

9.

Dominion's optical scanners (ICP) can be used with BMD-marked paper ballots or hand-marked paper ballots. The ICP units do not interpret the human-readable (text) portion of either type of ballot. Instead, the ICP units are programmed to read the QR Code for the BMD ballot or particular coordinates on hand marked ballot. Please see Exhibit A for a sample of coordinates on the hand-marked ballot. The target locations are then correlated to individual choices represented on the ballot. Pre-Logic and Accuracy Testing (Pre-LAT) is performed each election on every machine to verify that the target locations on hand-marked ballots, and the barcodes on BMD-marked ballots correspond correctly to the choices represented on the ballots and the digital cast-vote-records.

10.

Every ballot (hand-marked, or BMD generated) scanned on a Democracy Suite tabulator creates a digital image of the front and back of the ballot. In addition, the tabulators append an AuditMark to each image. The AuditMark is a text representation of how the tabulator interpreted the

ballot at scan time. This image can be used to audit the results of the election. Each AuditMark includes information on which tabulator the ballot was scanned. This unique feature of the ImageCast tabulators allows Election Officials to independently audit how the tabulator interpreted the QR Code or hand-marked ballot using a single image of the ballot with the appended AuditMark. It also includes a randomized sequence number when scanned on the ImageCast Precinct Tabulator. This randomized sequence number preserves voter anonymity as there is no way to correlate the sequence number to either an individual voter, or a specific point in time that the ballot was cast. When results and images are stored on the removable memory (Compact Flash cards), no date-timestamp information is included which prevents the ability to recreate the sequence of how the ballots were cast thus preserving voter anonymity.

11.

Any changes to the source code of any component of Democracy Suite would require new certification by the U.S. Election Assistance Commission and the State of Georgia.

12.

The Dominion BMDs being implemented in Georgia do not require calibration in the same way as Georgia's legacy DREs because they do not

use the same touch-screen technology. Instead, the ImageCastX BMD uses modern touch-screen technology, similar to an iPhone or Android phone, that does not require regular calibration.

13.

While all computers can be hacked with enough time and access, Dominion is not aware of any situation where an individual used the bar code on one of its units to launch software or to affect the operation of the unit.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed this 13<sup>th</sup> day of November, 2019.



---

DR. ERIC D. COOMER

## **EXHIBIT A**



